



Compass

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Bio-Complete

Material Safety Data Sheet

Issue: 01 - Sep 2016

Indigrow Ltd Safety data sheet according to Regulation (EC) No. 1907/2006. Page 1 of 9

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier Compass Bio-Complete

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant uses: Fertiliser. For professional use only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3. Details of the supplier of the safety data sheet

Company: Indigrow Ltd, The Old Bakery, Hyde End Lane, Brimpton, Berkshire, RG7 4RH. UK.

Phone: +44 (0) 1189 710 995

Email: growth@indigrow.com

1.4. Emergency telephone number +44 (0) 7725 962 366

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

Directive 67/548/EC and Directive 1999/45/EC:

In accordance with Directive 67/548/EC and Directive 1999/45/EC, the product is not classified as dangerous.

CLP Regulation (EC) n° 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.

Eye Irrit. 2: Eye irritation, Category 2, H319

Skin Irrit. 2: Skin irritation, Category 2, H315

2.2. Label elements

CLP Regulation (EC) n° 1272/2008:

Warning



Hazard indications: Eye Irrit. 2: H319 - Causes serious eye irritation

Skin Irrit. 2: H315 - Causes skin irritation

Cautionary advice: P264: Wash thoroughly after use

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+P352: IF ON SKIN: Wash with plenty of soap and water

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P332+P313: If skin irritation occurs: Get medical advice/attention

P337+P313: If eye irritation persists: Get medical advice/attention

Supplementary information: Non-applicable

2.3. Other hazards

Non-applicable

SECTION 3: Composition/Information on Ingredients

3.1. Substance

Non-applicable



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3.2. Mixture

Chemical description: Miscellaneous products
Components: In accordance with Annex II of Regulation (EC) n°1907/2006 (point 3), the product contains:

Identification	Chemical Name/Classification	Concentration
CAS: 7782-63-0 EC: 231-753-5 Index: Non-applicable REACH: 01-2119513203-57	Ferrous sulfate heptahydrate (Self-classified)	10-<20%
	Directive 67/548/EC Xi: R36/38; Xn: R22	
	Regulation 1272/2008 Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	
CAS: 55406-53-6 EC: 259-627-5 Index: 616-212-00-7 REACH: Non-applicable	3-iodo-2-propynyl Butylcarbamate (ATP ATP06)	<1%
	Directive 67/548/EC N: R50; T: R23, R48/23; Xi: R41, R43; Xn: R22	
	Regulation 1272/2008 Acute Tox. 3: H331; Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Sens. 1: H317; STOT RE 1: H372 - Danger	
CAS: 64-19-7 EC: 200-580-7 Index: 607-002-00-6 REACH: 01-2119475328-30	Acetic acid (ATP CLP00)	<1%
	Directive 67/548/EC C: R35; R10	
	Regulation 1272/2008 Flam. Liq. 3: H226; Skin Corr. 1A: H314 - Danger	

To obtain more information on the risk of the substances consult sections 8, 11, 12 and 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:	This product is not classified as hazardous through inhalation, however, it is recommended in case of intoxication symptoms to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.
By skin contact:	Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.
By eye contact:	Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.
By consumption:	Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2. Most important symptoms and effects, both acute and delayed

Acute and delayed effects are indicated in sections 2 and 11.

4.3. Indication of any immediate medical attention and special treatment needed

Non-applicable



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SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Product is non-flammable under normal conditions of storage, manipulation and use, containing flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

5.2. Special hazards arising from the substance or mixture

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3. Advice for fire-fighters

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: Accidental Release Measures

High risk of slipping due to leakage/spillage of product.

6.1. Personal precautions, protective equipment and emergency procedures

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertization agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2. Environmental precautions

Avoid spillage into an aqueous medium as it contains substances potentially dangerous for this. Contain the product absorbed in hermetically sealed containers. In the case of serious spillage into an aqueous medium notify the relevant authority.

6.3. Methods and material for containment and cleaning up

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4. Reference to other sections

See sections 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Precautions for safe manipulation: Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

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Technical recommendations for the prevention of fires and explosions:

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid projections and pulverizations. Consult section 10 for conditions and materials that should be avoided.

Technical recommendations to prevent ergonomic and toxicological risks:

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

Technical recommendations to prevent environmental risks:

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3).

7.2. Conditions for safe storage, including any incompatibilities

Technical measures for storage: Minimum Temp.: 0°C
Maximum Temp.: 40°C
Maximum time: 36 Months

General conditions for storage: Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5.

7.3. Specific end use(s)

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Substances whose occupational exposure limits have to be monitored in the work environment

Identification	Environmental limits		
	WEL (8h)	10 ppm	25 mg/m ³
Acetic Acid CAS: 64-19-7 EC: 200-580-7	WEL (15 min)	15 ppm	37 mg/m ³
	Year	2015	

DNEL (Workers):

Identification		Short Exposure		Long Exposure	
		Systemic	Local	Systemic	Local
Acetic Acid CAS: 64-19-7 EC: 200-580-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	25 mg/m ³	Non-applicable	25 mg/m ³

DNEL (Population):

Identification		Short Exposure		Long Exposure	
		Systemic	Local	Systemic	Local
Acetic Acid CAS: 64-19-7 EC: 200-580-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	25 mg/m ³	Non-applicable	25 mg/m ³

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PNEC:

Identification				
Acetic Acid CAS: 64-19-7 EC: 200-580-7	STP	85 mg/L	Fresh water	3.058 mg/L
	Soil	0.47 mg/kg	Marine water	0.3035 mg/L
	Intermittent	30.58 mg/L	Sediment (Fresh water)	11.36 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	1.136 mg/kg

8.2. Exposure controls

General security and hygiene measures in the work place:

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

Respiratory protection:	PPE:	Filter mask for particles
	Labelling:	CE CAT III
	CEN Standard:	EN 149:2001+A1:2009
	Remarks:	Replace when an increase in resistance to breathing is observed
Specific protection for the hands:	PPE:	Protective gloves against minor risks
	Labelling:	CE CAT I
	CEN Standard:	-
	Remarks:	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.
Ocular and facial protection:	PPE:	Panoramic glasses against liquid splash
	Labelling:	CE CAT II
	CEN Standard:	EN 166:2001; EN ISO 4007:2012
	Remarks:	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.
Bodily protection:	PPE:	Work clothing
	Labelling:	CE CAT I
	CEN Standard:	-
	Remarks:	-
	PPE:	Anti-slip work shoes
	Labelling:	CE CAT II
	CEN Standard:	EN ISO 20347:2012
	Remarks:	-
Additional emergency measures:	Emergency measure:	Emergency shower
	Standards:	ANSI Z358-1; ISO 3864-1:2002
	Emergency measure:	Eyewash stations
	Standards:	DIN 12 899; ISO 3864-1:2002
Environmental exposure controls:	In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D	
Volatile organic compounds:	With regard to Directive 2010/75/EU, this product has the following characteristics:	
	V.O.C. (Supply):	0 % weight
	V.O.C. density at 20 °C:	0 kg/m ³ (0 g/L)
	Average carbon number:	2
	Average molecular weight:	60.1 g/mol

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SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance:	Physical state at 20 °C:	Liquid
	Appearance:	Characteristic
	Colour:	Asparagus
	Odor:	Characteristic
Volatility:	Boiling point at atmospheric pressure:	100 °C
Product description:	Density at 20°C:	1086-1106 kg/m ³
	Relative density at 20°C:	1.086-1.106
	pH:	2-3
Flammability:	Flash Point:	Non Flammable (>60°C)
	Autoignition temperature	421°C

9.2. Other information

Surface tension at 20 °C:	Non-applicable
Refraction index:	Non-applicable

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions are expected if the following technical instructions storage of chemicals. See section 7.

10.2. Chemical stability

Chemically stable under the conditions of storage, handling and use.

10.3. Possibility of hazardous reactions

Under the specified conditions, hazardous reactions that lead excessive temperatures or pressure are not expected.

10.4. Conditions to avoid

Applicable for handling and storage at room temperature:

Shock and friction:	Not applicable
Contact with air:	Not applicable
Increase in temperature:	Precaution
Sunlight:	Precaution
Humidity:	Not applicable

10.5. Incompatible materials

Acids:	Avoid strong acids
Water:	Not applicable
Combustive materials:	Avoid direct impact
Combustible materials:	Not applicable
Others:	Avoid alkalis or strong bases

10.6. Hazardous decomposition products

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

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SECTION 11: Toxicological Information

11.1. Information on toxicological effects

The experimental information related to the toxicological properties of the product itself is not available.

Dangerous health implications:	In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:
Ingestion:	Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. See section 3. Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
Inhalation:	Based on available data, the classification criteria are not met. See section 3.
Contact with the skin and the eyes:	Contact with the skin: Produces skin inflammation. Contact with the eyes: Produces eye damage after contact.
CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):	Based on available data, the classification criteria are not met. See section 3.
Sensitizing effects:	Based on available data, the classification criteria are not met. See section 3.
Specific target organ toxicity (STOT)-time exposure:	Based on available data, the classification criteria are not met. See section 3.
Specific target organ toxicity (STOT)-repeated exposure:	Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
Aspiration hazard:	Based on available data, the classification criteria are not met. See section 3.
Other information:	Non-applicable.

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Ferrous sulfate heptahydrate CAS: 7782-63-0 EC: 231-753-5	1520 mg/kg	> 2000 mg/kg	Rat
	> 5 mg/l (4 h)		
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6 EC: 259-627-5	1100 mg/kg	2100 mg/kg	Rat
	> 5 mg/l		Rabbit
Acetic acid CAS: 64-19-7 EC: 200-580-7	2500 mg/kg	> 2000 mg/kg	Rat
	2.06 mg/l (4 h)		Rat

SECTION 12: Ecological Information

12.1. Toxicity

Identification	Acute toxicity		Specie	Genus
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6 EC: 259-627-5	LD50	0.07 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	0.09 mg/L (96 h)	Mysidopsis bahia	Crustacean
	EC50	0.05 mg/L (72 h)	Scenedesmus subspicatus	Algae
Acetic acid CAS: 64-19-7 EC: 200-580-7	LD50	75 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	47 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

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12.2. Persistence and degradability

Identification	Degradability		Biodegradability	
	Acetic acid CAS: 64-19-7 EC: 200-580-7	BOD5	Non-applicable	Concentration
Code		Non-applicable	Period	14 days
BOD5/COD		Non-applicable	% Biodegradable	74%

12.3. Bioaccumulative potential

Identification	Biodegradability	
	3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6 EC: 259-627-5	BCF
Pow Log		2.4
Potential		Moderate
Acetic acid CAS: 64-19-7 EC: 200-580-7	BCF	3
	Pow Log	-0.71
	Potential	Low

12.4. Mobility in soil

Identification	Absorption/desorption		Volatility	
	Acetic acid CAS: 64-19-7 EC: 200-580-7	Koc	Non-applicable	Henry
Conclusion		Non-applicable	Dry Soil	Non-applicable
Surface Tension		2.699E-2 N/m (25°C)	Moist Soil	Non-applicable

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

Not described

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Code	Description	Waste class (Directive 2008/98/EC)
06 10 02*	Wastes containing hazardous substances	Dangerous

 Type of waste (Regulation (EU) No 1357/2014):
 HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC, The Waste Regulations 2011, 2011 No. 988). As under 15 01 (2014/955/EU) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) n°1907/2006 (REACH) the community or state provisions related to waste management are stated.

Community legislation:

Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014



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SECTION 14: Transport Information

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains 3-iodo-2-propynyl Butylcarbamate, Bronopol (INN).

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: 3-iodo-2-propynyl Butylcarbamate (Product-type 6, 7, 8, 9, 10, 13)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc): Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009, 2009 No. 716

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009), SI 2009 No 1348

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011, 2011 No. 1885

Control of Substances Hazardous to Health Regulations 2002 (as amended)

EH40/2005 Workplace exposure limits

The Waste Regulations 2011, 2011 No. 988

15.2. Chemical Safety Assessment

The supplier has not carried out evaluation of chemical safety.

16. OTHER INFORMATION

The information contained herein relates only to the designated formulation and may not be valid if product is used in combination with other substances. The information is to the best of our knowledge, belief and understanding, true, accurate and reliable at the date of issue. However, the information may neither be exhaustive or complete, and no warranty, guarantee or liability concerning the accuracy or completeness of the information is expressed or implied. It is the user's risk and sole responsibility to verify and satisfy their own criteria and duty of care concerning the validity of the information in relation to their application of the product.

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